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August 12, 2010

Philip Giudice, Commissioner
Department of Energy Resources
100 Cambridge Street, 10th Floor
Boston, MA 02114

Via email: doer.biomass@state.ma.us

Re: **Carbon Accounting and Biomass/RPS Policy Directions**

Dear Commissioner Guidice:

On behalf of Mass Audubon, I submit the following comments in response to the Department of Energy Resources (DOER) request for public input on carbon accounting and woody biomass. DOER's request is in response to recent scientific findings including the *Biomass Sustainability and Carbon Policy Study* produced by the Manomet Center for Conservation Sciences under DOER contract.

Mass Audubon supports DOER's efforts to revise the Renewable Portfolio Standard (RPS) to incorporate the latest science and ensure that state financial incentives for renewable energy are optimized to maximize real reductions in Greenhouse Gas (GHG) emissions; ensure the most efficient use of available, sustainably harvested woody biomass; and promote the long term protection and sustainable management of forests in Massachusetts and across the region. It is vital that any RPS credits for biomass be formulated to ensure that these financial incentives will only be available for projects that will result in actual GHG emission reductions compared to the production of energy from efficient fossil fuel facilities within a timeframe consistent with the goals of the Global Warming Solutions Act (GWSA). The Manomet study and other scientific data demonstrate that most uses of biomass for utility scale electric generation cannot meet this standard. Therefore it is appropriate and in fact essential that DOER revise the RPS to constrain the applicability of renewable energy credits to the highest efficiency forms of biomass use.

As noted in Mass Audubon's position statement on woody biomass, comments on the Manomet report, and other correspondence and testimony, global warming presents a real and serious threat to people and wildlife. The position statement and comments on the Manomet report are attached to and should be considered part of this letter.

Reform both the RPS and the Forest Cutting Practices Regulations

The review of the RPS standards that DOER is presently conducting addresses one of the two main elements of Mass Audubon's position. The other key regulatory reform that the state needs to undertake is revision to the Forest Cutting Practices (FCP) regulations pursuant to Ch. 132. Revising renewable energy incentives to promote the development of energy sources and facilities that will help the state meet the GHG reduction targets established in the GWSA is very important. However, this alone will not ensure that the forests of Massachusetts, which presently sequester nearly 10% of the state's carbon emissions annually, are managed in a manner that will maximize their carbon storage or other ecosystem service capacities. The inclusion of

harvesting standards that require retention of standing and dead wood within a harvested stand is also necessary. In addition, a number of other revisions to the FCP regulations are also needed to improve protections to wetlands and prevent the abuse of the forestry exemption under the Wetlands Protection Act such as land development preparatory work performed under the guise of forest management.

RPS Revisions

Mass Audubon supports the policy directions described in Executive Office of Energy and Environmental Affairs Secretary Ian Bowles' letter to you dated July 7, 2010, including:

1. Establishing a maximum practicable efficiency standard that facilities would be required to meet to qualify for renewable energy certificates. The new standard is likely to favor high efficiency, smaller scale Combined Heat and Power (CHP) units, and this is appropriate not only in relation to GHG emissions but also to maximize the efficiency of use of limited available biomass.
2. Provisions requiring facilities to reduce emissions compared to the lifecycle GHG emissions of the most efficient comparable fossil unit or the facility being replaced.
3. Standards and criteria for eligibility of fuel sources for RPS-eligible biomass facilities, in addition to compliance with the FCP regulations, which also should be strengthened.
4. Regulations limiting the amount of residues (including tops and branches) that can be removed during a forest harvest for biomass fuel, and on the amount of sawtimber that can be used as fuel. Sawtimber is a valuable natural resource in its own right. The commonwealth should encourage the growth and harvest of high quality, high value sawtimber that will be used in durable products and store carbon over long periods of time.
5. Exclusion of construction and demolition debris from eligibility for RPS certificates. In addition, Mass Audubon recommends that the regulations prohibit the use of wood from land clearing operations as eligible fuel. Land clearing for development results in a permanent and immediate loss of carbon stored in a forest, is not renewable, is unsustainable, and is counterproductive to the GHG emission goals the RPS program is intended to support.
6. Retaining rules allowing the use of energy from anaerobic digestion of agricultural and sewage waste – we agree that the regulations do not need to be altered in relation to these kinds of fuel sources at this time.

Response to DOER Questions

The notice for the public informational sessions and comment period included three questions on which DOER was seeking input. The following are Mass Audubon's responses (*questions in italics*):

- *Woody biomass has the potential to be utilized in numerous energy markets. How should DOER assure full and best use to reduce GHG emissions? (scale, efficiency, technology, geographical limits?)*

The revisions to the RPS regulations can promote efficient use as proposed in Secretary Bowle's letter. In considering the amount of woody biomass available, DOER should take into account other likely uses of this material including demand for firewood and wood pellets. The RPS system should have built-in safeguards to ensure that there are no financial incentives available from the state for the development of inefficient or excessively large scale facilities. The revisions to the FCP regulations are also important to ensure that overharvesting will not occur.

Routine maintenance of roadway edges and utility rights of way and urban areas will continually generate woody biomass. The amount of such annually available material needs to be estimated as part of the state's efforts to appropriately scale the use of woody biomass. These land maintenance sources should be clearly distinguished from biomass material generated from land-clearing resulting from new development or other conversions of existing forest to open areas (which should not be RPS eligible as we commented previously).

- *GHG emissions vary considerably with different types of biomass feedstock. How should DOER categorize wood markets to reflect the differences in emissions?*

This is a technical question that we have not analyzed in detail, but it would seem that it should be possible to categorize feedstocks from wood harvesting residues and rights of way maintenance in some general ways, e.g. hardwood vs. softwood; chipped large diameter material vs. brush or agricultural wastes; and dried vs. green material.

A more important question may be how to distinguish feedstock that is sustainably and renewably harvested from material that is not, and that therefore should not qualify as contributing toward a facility's RPS credits.

The RPS standard should not encourage the conversion of natural forests to plantations. The immediate large loss of carbon during any such conversion should be accounted for in the lifecycle analysis. In most instances that would require very long carbon recapture periods not consistent with the standards proposed by Secretary Bowles and which Mass Audubon supports.

The proximity of the wood source to the site of use and associated transportation-related GHG emissions should also be factored into the criteria for eligibility.

A workable, efficient, transparent, and verifiable program needs to be established to distinguish RPS-eligible material from those materials that are not eligible. Certification by licensed foresters that material comes from eligible Forest Cutting Plans could be part of this process, but will need to be supplemented by other information and independent auditing. Entities that undertake rights-of-way or yard-related maintenance and tree and brush removals will need mechanisms to verify the sources of these materials as eligible fuel. Safeguards will need to be built in to ensure that land clearing or land use conversion material is not mixed in with eligible sources for purposes of RPS accounting.

The program should be structured to incentivize the long term protection and sustainable management of forestlands and to work as a disincentive to development of forestlands. DOER should consider whether to provide additional levels of credit for use of materials from private properties that are under permanent protection or long term easements (e.g. 100 years) and which are managed according to standards that exceed the state FCP standards. If the only harvesting standard is the FCP regulations, then there is no guarantee that the land will remain in forest condition long enough to recapture the carbon emitted from harvesting and burning of residues. We understand the constraints that would be involved in only allowing material from land that is permanently protected to qualify for RPS credits. And we agree with the Forest Futures Vision report recommendations whereby public lands should be primarily managed for their many ecosystem services and values to the public, not as sources of fuel for energy production. DOER needs to establish a system that will promote long term forest protection and productivity while not being so restrictive that reasonable use of residues from well-planned and sustainable silvicultural practices on privately owned but not permanently protected land is excluded.

It is important to note that in most instances even careful, sustainable harvesting of forests in Massachusetts will reduce both their current carbon storage and their ongoing carbon sequestration rate. This important factor was not part of the Manomet analysis and needs to be considered in calculating GHG emissions.

- *New regulations and policies will influence the development of any proposed biomass facility. How should DOER treat existing electrical generation plants currently receiving REC's?*

We understand that revisions would initially be applied only to new facilities. However we encourage DOER to develop rules to encourage existing facilities to transition to the new standards or, where that is not possible, to phase out credits for those facilities over time. This process should be done in a manner that is reasonable and fair while also meeting the state's GHG targets. It is important that the RPS system does not allow facilities toward state emission reduction goals if they are not meeting the new standards. When the state conducts its calculations of emissions reductions and in refining the RPS or other financial incentive programs, it is vital that the best available science be applied and that the calculated emission reductions are real.

Conclusion

Thank you for the opportunity to comment. Mass Audubon appreciates the fact that DOER is responding to emerging science and policy issues related to biomass, GHG emissions, and forestland management. We encourage you to continue to work with Secretary Bowles and other agencies to update and harmonize all regulations and programs related to these topics, including revisions to the FCP regulations and establishment of GHG emission thresholds in the Massachusetts Environmental Policy Act (MEPA) regulations.

Sincerely,



John J. Clarke
Director of Public Policy and Government Relations

cc: EEA Secretary Ian Bowles
DCR Commissioner Richard Sullivan
DEP Commissioner Laurie Burt
DFG Commissioner Mary Griffin
MEPA Director Alicia McDevitt
Lee Dillard Adams, DEP
Robert Rizzo, DOER

Mass Audubon works to protect the nature of Massachusetts for people and wildlife. Together with more than 100,000 members, we care for 34,000 acres of conservation land, provide educational programs for 225,000 children and adults annually, and advocate for sound environmental policies at local, state, and federal levels. Mass Audubon's mission and actions have expanded since our beginning in 1896 when our founders set out to stop the slaughter of birds for use on women's fashions. Today we are the largest conservation organization in New England. Our statewide network of wildlife sanctuaries, in 90 Massachusetts communities, welcomes visitors of all ages and serves as the base for our work. To support these important efforts, call 800-AUDUBON (283-8266) or visit www.massaudubon.org.

Protecting the Nature of Massachusetts